

**Status of the Claims**

1-12. (Cancelled)

13. (Previously presented) A method of identifying peptoids, in a library of different-sequence peptoids, which are effective in transfecting a cell with an oligonucleotide, the method comprising:

- (i) contacting each peptoid in the library with an oligonucleotide, to form a plurality of peptoid-oligonucleotide mixtures,
- (ii) contacting each said mixture with a cell;
- (iii) screening each cell for transfection of the oligonucleotide, to identify transfected cells; and
- (iv) identifying transfecting peptoids in mixtures contacted with transfected cells.

14. (Original) The method of claim 13, wherein said library of peptoids is provided in an array of physically separated compartments.

15. (Previously presented) The method of claim 14, wherein said peptoids are supported on solid particles.

16. (Original) The method of claim 15, further comprising the step of releasing the peptoids from the particles in said compartments, prior to said contacting step (i).

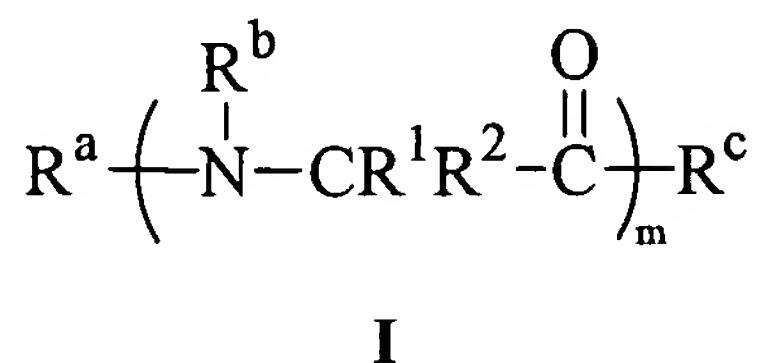
17. (Original) The method of claim 15, wherein each compartment contains a single particle, and each particle contains a single peptoid.

18-20. (Cancelled)

21. (Previously presented) The method of claim 13, wherein, in step (ii), each said mixture is contacted with a plurality of distinct cell types.

22-23. (Cancelled)

24. (Original) The method of claim 13, wherein said different-sequence peptoids have the general formula I:



where

$R^a$  is selected from the group consisting of alkyl, aryl, aralkyl, aralkenyl, and aralkynyl, any of which may be substituted with one or more groups X; hydrogen, -OH, -SH, -COOH, sulfonyl, and a lipid moiety, wherein said lipid moiety may be conjugated to a linker moiety,

each  $R^b$  is independently selected from the group consisting of alkyl, aryl, aralkyl, aralkenyl, and aralkynyl, any of which may be substituted with one or more groups X; and hydrogen,

wherein at least one group  $R^b$  is not hydrogen;

$R^c$  is selected from the group consisting of alkyl, aryl, aralkyl, aralkenyl, and aralkynyl, any of which may be substituted one or more groups X; hydrogen, -OH, -SH, -NH<sub>2</sub>, -NHR, -NH(C=O)R, where R is lower alkyl; sulfonyl, hydrazine, and a lipid moiety, wherein said lipid moiety may be conjugated to a linker moiety;

X is selected from hydroxy, alkoxy, amino, guanidino, amidino, alkylamino, alkylthio, halogen, nitro, cyano, keto, aldehyde, carboxylic acid, carboxylic ester, carboxylic amide, sulfonic acid and sulfonic ester;

$R^1$  and  $R^2$  are independently selected from hydrogen, lower alkyl, and lower alkoxy; and m is an integer selected from 2 to about 50.

25. (Original) The method of claim 24, wherein in formula I,  $R^a$  comprises a lipid moiety, and  $R^c$  is selected from -NH<sub>2</sub>, -NHR, and -NH(C=O)R, where R is lower alkyl.

26. (Original) The method of claim 25, wherein said lipid moiety is a sterol.
27. (Original) The method of claim 24, wherein in formula **I**, each of R<sup>1</sup> and R<sup>2</sup> is hydrogen.
28. (Original) The method of claim 24, wherein in formula **I**, at least one R<sup>b</sup> includes a group which is cationic at physiologically relevant pH, and at least one R<sup>b</sup> is uncharged at physiologically relevant pH.
29. (Previously presented) The method of claim 28, wherein said cationic group is selected from aminoalkyl, guanidino, amidino, imidazole, and pyridinium.
- 30-32. (Cancelled)